

Notice of Allowability

Application No.

10/060,840

Examiner

Melody M. Burch

Applicant(s)

BARNETT, BURTON

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/16/04.
2. ☒ The allowed claim(s) is/are 1,3-7,9-12,14-20,22-31.
3. ☒ The drawings filed on 30 April 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Robert A. Siconolfi
ROBERT A. SICONOLFI
PATENT EXAMINER
3/7/05

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Gabor Szekeres on 3/4/05. Attorney also authorizes the charging of fees for the additional independent claims to charge account number 502362.

The application has been amended as follows:

- In line 13 of claim 1 the phrase "first anti-terrorist coded" has been changed to --first coded--;
- In line 13 of claim 7 the phrase "first anti-terrorist coded" has been changed to --first coded--;
- Claim 13 has been cancelled;
- Claim 14 has been rewritten in independent form to include the limitations of claim 13 as follows:

--An apparatus for locking and unlocking a brake actuator of a dual chamber brake system that operates brakes with compressed air, wherein the dual chamber includes the brake actuator in a first pressurizable chamber that serves as a service housing chamber and a high spring-rate spring in a second pressurizable chamber that serves as an emergency housing chamber, the brake actuator being movable in an axial direction to apply and

release the brakes of the brake system; in the absence of compressed air the high spring-rate spring expanding to bias and keep the brake actuator in an axially forward position locking the brakes of the brake system, and wherein when there is compressed air in the second chamber the high spring-rate spring is compressed and allows retraction of the brake actuator from its forward position to unlock the brakes, the apparatus comprising: electro mechanical means, the electro mechanical means being mounted in one of the pressurizable service housing chamber and the pressurizable emergency housing chamber and being responsive to a first coded signal or to a third coded signal different from the first signal, for venting pressurized air from the second chamber and for preventing entry of pressurized air into the second chamber whereby expansion of the high spring-rate spring causes the brake actuator to move into the axially forward position locking the brakes of the brake system, the electro mechanical means also being responsive to a second coded signal or to a fourth coded signal for allowing pressurized air to enter into the second chamber and for disallowing the venting of pressurized air from the second chamber thereby unlocking the brake actuator and unlocking the brakes; wherein an inlet port is included in the second chamber, said inlet port allowing attachment of a hose through which pressurized air is normally supplied to the second chamber, and wherein the electro mechanical means include a solenoid valve mounted in the pressurizable second chamber to shut-off the supply of pressurized air through the inlet port

in response to the first or to the third coded signal, and allow the supply of pressurized air through the inlet port in response to the second coded or to the fourth coded signal.--;

- Claim 16 has been rewritten in independent form to include the limitations of claim 13 as follows:

--An apparatus for locking and unlocking a brake actuator of a dual chamber brake system that operates brakes with compressed air, wherein the dual chamber includes the brake actuator in a first pressurizable chamber that serves as a service housing chamber and a high spring-rate spring in a second pressurizable chamber that serves as an emergency housing chamber, the brake actuator being movable in an axial direction to apply and release the brakes of the brake system; in the absence of compressed air the high spring-rate spring expanding to bias and keep the brake actuator in an axially forward position locking the brakes of the brake system, and wherein when there is compressed air in the second chamber the high spring-rate spring is compressed and allows retraction of the brake actuator from its forward position to unlock the brakes, the apparatus comprising: electro mechanical means, the electro mechanical means being mounted in one of the pressurizable service housing chamber and the pressurizable emergency housing chamber and being responsive to a first coded signal or to a third coded signal different from the first signal, for venting pressurized air from the second chamber and for preventing entry of pressurized air into the second

chamber whereby expansion of the high spring-rate spring causes the brake actuator to move into the axially forward position locking the brakes of the brake system, the electro mechanical means also being responsive to a second coded signal or to a fourth coded signal for allowing pressurized air to enter into the second chamber and for disallowing the venting of pressurized air from the second chamber thereby unlocking the brake actuator and unlocking the brakes; wherein the electro mechanical means include a solenoid valve and a receiver decoder, said receiver decoder being mounted in one of the pressurizable first and second chambers and the receiver decoder being adapted for receiving the first, second, third, and fourth coded signals and for controlling the solenoid valve in response to said signals.--;

- Claim 21 has been cancelled;
- Claim 22 has been rewritten in independent form to include the limitations of claim 21 as follows:

--A dual chamber brake system for locking and unlocking a brake actuator of a dual chamber brake system that operates brakes with compressed air to be used in trailers and vehicles, the brake system including the brake actuator in a first pressurizable chamber that serves as a service housing chamber and a high spring-rate spring in a second pressurizable chamber that serves as an emergency housing chamber, the brake actuator being movable in an axial direction to apply and release the brakes of the brake system; in the absence of compressed air the high spring-rate spring expanding to bias and keep the

brake actuator in an axially forward position locking the brakes of the brake system, and wherein when there is compressed air in the second chamber the high spring-rate spring is compressed and allows retraction of the brake actuator from its forward position to unlock the brakes, the dual chamber brake system further comprising: electro mechanical means, the electro mechanical means being mounted in one of the pressurizable service housing chamber and the pressurizable emergency housing chamber and being responsive to a first coded signal or to a third coded signal different from the first signal, for venting pressurized air from the second chamber and for preventing entry of pressurized air into the second chamber whereby expansion of the high spring-rate spring causes the brake actuator to move into the axially forward position locking the brakes of the brake system, the electro mechanical means also being responsive to a second coded signal or to a fourth coded signal for allowing pressurized air to enter into the second chamber and for disallowing the venting of pressurized air from the second chamber thereby unlocking the brake actuator and unlocking the brakes; wherein an inlet port is included in the second chamber, said inlet port allowing attachment of a hose through which pressurized air is normally supplied to the second chamber, and wherein the electro mechanical means include a solenoid valve mounted in the pressurizable second chamber to shut-off the supply of pressurized air through the inlet port in response to the first or to the third coded signal, and allow the supply of pressurized air

through the inlet port in response to the second coded or to the fourth coded signal.--;

- Claim 24 has been rewritten in independent form to include the limitations of claim 21 as follows:

--A dual chamber brake system for locking and unlocking a brake actuator of a dual chamber brake system that operates brakes with compressed air to be used in trailers and vehicles, the brake system including the brake actuator in a first pressurizable chamber that serves as a service housing chamber and a high spring-rate spring in a second pressurizable chamber that serves as an emergency housing chamber, the brake actuator being movable in an axial direction to apply and release the brakes of the brake system; in the absence of compressed air the high spring-rate spring expanding to bias and keep the brake actuator in an axially forward position locking the brakes of the brake system, and wherein when there is compressed air in the second chamber the high spring-rate spring is compressed and allows retraction of the brake actuator from its forward position to unlock the brakes, the dual chamber brake system further comprising: electro mechanical means, the electro mechanical means being mounted in one of the pressurizable service housing chamber and the pressurizable emergency housing chamber and being responsive to a first coded signal or to a third coded signal different from the first signal, for venting pressurized air from the second chamber and for preventing entry of pressurized air into the second chamber whereby

- expansion of the high spring-rate spring causes the brake actuator to move into the axially forward position locking the brakes of the brake system, the electro mechanical means also being responsive to a second coded signal or to a fourth coded signal for allowing pressurized air to enter into the second chamber and for disallowing the venting of pressurized air from the second chamber thereby unlocking the brake actuator and unlocking the brakes; wherein the electro mechanical means include a solenoid valve and a receiver decoder, said receiver decoder being mounted in one of the pressurizable first and second chambers and the receiver decoder being adapted for receiving the first, second, third and fourth coded signals and for controlling the solenoid valve in response to said signals.;
- In lines 14-15 of claim 29 the phrase "a first anti-terrorist coded signal or to a third anti-theft coded" has been changed to --a first coded signal or to a third coded--;
 - In lines 17-18 of claim 31 the phrase "a first anti-terrorist coded signal or to a third anti-theft coded" has been changed to --a first coded signal or to a third coded--.

2. The following is an examiner's statement of reasons for allowance: The prior art of record fails to show the limitation of the electro mechanical means including a solenoid valve mounted in the pressurizable second chamber. St. Onge teaches the use of a solenoid valve 57, for example, however the solenoid valve is not mounted in the second pressurizable chamber nor is it responsive to coded signals. Kee et al.

teach the use of a solenoid valve being responsive to coded signals; however, the solenoid valve is not mounted specifically in a pressurizable chamber. Leiber teaches the use of a solenoid being mounted in a chamber; however, the chamber is not in the environment of an air brake chamber. Dubois teaches the use of a solenoid being mounted in a chamber; however, it is not in one of the pressurizable air brake chambers. Therefore, there would have been no motivation to have combined the teachings of Leiber or Dubois with the structure of St. Onge modified by Kee et al. except the use of hindsight reasoning. Also using the Leiber or Dubois references in the rejection results in a modification of the modifying reference, Kee et al. The prior art of record also fails to show the limitation of the electro mechanical means including a solenoid valve and a receiver decoder with the receiver decoder being mounted in one of the pressurizable first and second chambers. St. Onge shows the use of an electro mechanical means in the form of a solenoid valve, but the reference fails to include the limitation of the electro mechanical means being responsive to coded signal. Although Kee et al. teach the use of an electro mechanical means being responsive to coded signals and a receiver decoder 18, Kee et al. fail to include the limitation of the receiver decoder being mounted in one of the two pressurizable chambers of an air brake. Treusch teaches the use of a Hall effect sensor in a chamber of an intake manifold. Examiner notes that there is no motivation to have looked to an intake manifold arrangement to modify the arrangement of the receiver decoder of Kee et al. Examiner notes that the Treusch reference is non-analogous art and that using the Treusch reference in the rejection results in a modification of the modifying reference, Kee et al.

Accordingly, independent claims 1, 7, 14, 16, 22, 24, and 29 are allowable. Also claim 29 as well as claim 31 are allowable because they include the limitation set forth in allowable claim 19.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Monday-Friday (7:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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